# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of

**IP-Enabled Services** 

WC Docket No. 04-36

In the Matter of

Petition of SBC Communications Inc. for Forbearance Under 47 U.S.C. § 160 from Application of Title II Common Carrier Regulation to "IP Platform Services"

WC Docket No. 04-29

#### REPLY COMMENTS OF THE VERIZON TELEPHONE COMPANIES

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#### I. INTRODUCTION AND SUMMARY

In order to encourage the investment and technological innovation necessary for IP-enabled services to fulfill their promise, the Commission must adopt a regulatory approach that relies on competition rather than on economic regulation, imposing discrete, uniform requirements on all providers of these services only to further specific policy objectives. Most commenters in this proceeding agree that this Commission must not only assert exclusive jurisdiction over these interstate services but also take concrete steps to ensure that all providers of IP-enabled services are subject to the same obligations.

As many commenters observed, the most important step the Commission can take to promote the advancement of IP-enabled services and to prevent the growth of a patchwork of burdensome and potentially inconsistent state rules is to declare that all IP-enabled services are interstate services subject to exclusive federal jurisdiction. The packet-switched network

transmits data irrespective of jurisdictional boundaries. Allowing states to regulate these services would not only interfere with the Commission's authority over interstate communications but would also impose potentially crippling regulatory obligations on IP-enabled service providers, inevitably chilling investment and deployment of IP-enabled services. Moreover, because the Commerce Clause prohibits states from either regulating conduct beyond their borders or placing undue burdens on interstate commerce relative to the local benefits, states lack authority to regulate IP-enabled services.

In exercising its exclusive authority over IP-enabled services, the Commission should refrain from imposing traditional economic regulation. As many commenters have shown, economic regulation of VoIP and other IP-enabled services is unnecessary in the competitive environment that exists today. In fact, regulation of these services – whether through price controls, tariff requirements, or entry and exit restrictions – would be affirmatively harmful. Allowing IP-enabled services to continue to develop without economic regulation will promote investment and job growth and will benefit consumers through greater innovation, true product differentiation, and individual choice. Consistent with this deregulatory approach, the Commission should reject the "layers" theory as bald effort to subject certain providers of IPenabled services to discriminatory and extensive regulation while allowing others to compete unhampered by regulatory obligations. Contrary to MCI's argument, there is already robust competition for broadband services, and in any event, there is no basis for concluding that providers of physical networks will impede the free flow of traffic at the higher layers of the network because these providers, including the ILECs, lack market power in broadband network services. Consequently, the Commission should not impose any of its *Computer Inquiry* requirements on these services, and it should treat all providers of these highly competitive

services as "non-dominant." The Commission should also forbear from applying the traditional economic regulations of Title II to these services.

The Commission should require providers of VoIP services to pay appropriate access charges whenever they use the public switched telephone network ("PSTN") to originate or terminate interexchange calls. Requiring payment of appropriate access charges allows local carriers to recover the costs of the local exchange network and ensures that the cost of the PSTN are borne equitably among those that use it in similar ways. Requiring the payment of access charges under these circumstances is also consistent with the Commission's current rules.

Finally, some minimal regulation of VoIP services is necessary to protect important policy objectives. Most commenters agree that rules to ensure law enforcement access, emergency 911 service, universal service, disability access, and availability of numbering resources should apply in the new IP-enabled services environment, whereas detailed antislamming rules are unnecessary at this time. Once again, though, it is critical that the Commission resist arguments urging the imposition of these obligations only on some providers of IP-enabled services and not others.

### II. IP-ENABLED SERVICES ARE INTERSTATE AND SUBJECT TO EXCLUSIVE FEDERAL JURISDICTION

The Commission should exercise its exclusive jurisdiction over IP-enabled services and preempt state regulation of those services. Allowing states to regulate IP-enabled services would not only interfere with the Commission's exclusive jurisdiction over interstate communications, but would also require IP-enabled service providers to comply with a patchwork of state regulations, inevitably chilling investment and deployment of IP-enabled services. In any event, because the Commerce Clause prohibits states from either regulating conduct beyond their

borders or placing undue burdens on interstate commerce relative to the local benefits, states lack authority to regulate IP-enabled services.<sup>1</sup>

Most commenters agree that IP-enabled services are interstate.<sup>2</sup> As the Commission has explained, the Internet is "an international network of interconnected computers enabling millions of people to communicate with one another and to access vast amounts of information from around the world." Applications provided over the Internet "involve computers in multiple locations, often across state and national boundaries." Given the interjurisdictional nature of the Internet, a user may "access websites that reside on servers in various state[s] or foreign countries, communicate directly with another Internet user, or chat on-line with a group

In order to find IP-enabled services to be jurisdictionally interstate and subject to exclusive federal jurisdiction, the Commission does not need to decide whether IP-enabled services are "information services" or "telecommunications services." In *California v. FCC*, 905 F.2d 1217 (9th Cir. 1990) ("*California P*"), the court specifically rejected the argument that whether the Commission had jurisdiction to regulate a particular service depended on whether that service was considered to be "enhanced" or "basic." *See id.* at 1239-40 ("As long as enhanced services are provided by communications carriers over the intrastate telephone network, the broad 'in connection with' language of § 2(b)(1) places them squarely within the regulatory domain of the states."). Rather, the critical issue is whether the service itself is interstate or whether, if the service is "mixed," a state's regulation of any intrastate portion of the service would necessarily thwart or impede the exercise of lawful federal authority over interstate communications. *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 880 F.2d 422, 430 (D.C. Cir. 1989). As described in the text, IP-enabled services are "mixed," and state regulation of these services would thwart the FCC's authority over them.

<sup>&</sup>lt;sup>2</sup> See, e.g., Cablevision Comments at 11-13; SBC Comments at 26-29; CISCO Comments at 3, 6.

<sup>&</sup>lt;sup>3</sup> Memorandum Opinion and Order, *GTE Telephone Operating Cos.*, 13 FCC Rcd 22466, 22468, ¶ 5 (1998) ("*GTE Order*"); *see also* Declaratory Ruling and Notice of Proposed Rulemaking, *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, 17 FCC Rcd 4798, 4799, ¶ 1 n.1 (2002), *vacated in part on other grounds*, *Brand X Internet Servs. v. FCC*, 345 F.3d 1120 (9th Cir. 2003) (defining "the Internet" as a "global information system").

<sup>&</sup>lt;sup>4</sup> Order on Remand and Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 16 FCC Rcd 9151, 9178, ¶ 58 n.115 (2001) ("ISP Remand Order"), remanded sub nom. WorldCom, Inc. v. FCC, 288 F.3d 429 (D.C. Cir. 2002), cert. denied sub nom. Core Communications, Inc. v. FCC, 123 S. Ct. 1927 (2003).

of Internet users located in the same local exchange or in another country, and may do so either sequentially or simultaneously."<sup>5</sup> The same is true for IP-enabled services, generally. IP enabled services rely on the same dispersed networks that the Internet comprises; these services offer the same capability of interacting with a multitude of information sources in different jurisdictions during a single communication.

Several commenters argue that because *some* IP-enabled communications will be intrastate, states should exercise their statutory authority over those intrastate communications.<sup>6</sup> But, as the Commission explained in the *Pulver Order*, where it is not possible as a practical or economic matter to separate the interstate and intrastate components of an IP-enabled service without negating federal objectives for the interstate component, there is exclusive Commission jurisdiction.<sup>7</sup> That holding is directly applicable to IP-enabled services in general for at least two separate reasons.

First, many IP-enabled services are portable -i.e., end users may use them wherever they have access to a broadband connection. Depending on the particular service, a VoIP user may connect a telephone anywhere and yet appear to be communicating from the assigned area code.

<sup>&</sup>lt;sup>5</sup> GTE Order, 13 FCC Rcd at 22478-79, ¶ 22; see also ISP Remand Order, 16 FCC Rcd at 9178, ¶ 58 (recognizing that "[m]ost Internet-bound traffic traveling between a LEC's subscriber and an ISP is indisputably interstate in nature when viewed on an end-to-end basis").

<sup>&</sup>lt;sup>6</sup> See, e.g., Minnesota PUC Comments at 10-11; California PUC Comments at 42; New Jersey Division of the Ratepayer Advocate Comments at 15; Ohio PUC Comments at 19-21.

<sup>&</sup>lt;sup>7</sup> See Memorandum Opinion and Order, *Petition for Declaratory Ruling that Pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, 19 FCC Rcd 3307, 3322, ¶ 22 (2004) ("*Pulver Order*"); *see also California v. FCC*, 39 F.3d 919, 932 (9th Cir. 1994) ("*California II*") (where "economic and operational factors" mean that complying with state regulations "essentially negat[es] the FCC's goal," the Commission has authority to preempt the state's regulation of the intrastate service).

As the Commission found in the *Pulver Order*, a service is not "purely intrastate" when the user's "physical locations can continually change."

Second, even when a service has both interstate and intrastate components, the Commission has exclusive jurisdiction where it is impossible or completely impractical to differentiate between those components. Pi P addresses, which are used to route IP services to or from a particular end user's device (e.g., computer or IP phone), have no necessary relation to the physical location of the user. They are assigned at the point where the device connects to the Internet, which may or may not be in the same geographic location as the end user. Moreover, in many situations, service providers use "dynamic IP addressing" for residential customers, which assigns an address each time the user connects to the Internet. Once the user ends his or her Internet session or turns off the computer, the IP address can be reassigned to another user. Depending on the provider's network architecture, the IP address could be assigned to a connection in another geographic location or even another state. In the case of IP-enabled services, there is currently no commercially feasible way for providers reliably to associate a particular customer's IP address with that customer's specific geographic location.

<sup>&</sup>lt;sup>8</sup> Pulver Order, 19 FCC Rcd at 3320, ¶ 20.

<sup>&</sup>lt;sup>9</sup> See Louisiana Pub. Serv. Comm'n v. FCC, 476 U.S. 355, 375 n.4 (1986) (Commission has jurisdiction "where it was not possible to separate the interstate and intrastate components of the asserted FCC regulation"); California I, 905 F.2d at 1243; National Ass'n of Regulatory Util. Comm'rs v. FCC, 880 F.2d 422, 429 (D.C. Cir. 1989) (recognizing that a limit "on a state's authority over intrastate telephone service occurs when the state's exercise of that authority negates the exercise by the FCC of its own lawful authority over interstate communication").

<sup>&</sup>lt;sup>10</sup> This ensures that IP addresses, which are limited in comparison to the number of Internet users, are not "tied up" when the user is not connected.

<sup>&</sup>lt;sup>11</sup> A number of companies offer services for commercial use that attempt to match IP addresses associated with online customers with outside sources of data to determine the geographic location of the customer (in order, for example, to customize news services by providing different information by time zone). This "geolocation" technology has significant

To develop technology that could overcome these limitations, and accurately and reliably locate a particular customer on the basis of the assigned IP address, would be extremely difficult and expensive and could end up requiring IP-enabled service providers to undertake significant modifications to, or even completely redo, their network architecture. As a result, it would directly frustrate the federal policy objective of promoting the rapid and efficient deployment of innovative new IP-based services. As the Commission itself recognized, requiring providers of IP-enabled services "to locate its members for the purpose of adhering to a regulatory analysis that served another network would be forcing changes on this service for the sake of regulation itself, rather than for any particular policy purpose." Furthermore, any effort along these lines ultimately would be self-defeating, since it would merely prompt development of new ways of getting around any systems that were developed. The cost and complexity of countering *these* developments would only further frustrate the federal policy. And on the cycle would go.

Other commenters argue that state jurisdiction over IP-enabled services should be permitted because state regulation would not necessarily be inconsistent with federal policy. For example, the Vermont PSB argues that preemption of state regulation over IP-enabled services is unnecessary because "[n]ot *all* forms of state regulation would impose harm on IP-Enabled services." Vermont PSB Comments at 28 (emphasis added).<sup>13</sup> But the fact that some state

limitations. For example, it cannot pierce the server architecture of large corporate networks deploying one or more proxy servers that function as gateways or hubs. In any case, "it would be impractical to determine whether there was any intrastate component to FWD given the fact that FWD's information service as provided to its members occurs solely within the confines of the Internet." *Pulver Order*, 19 FCC Rcd at 3320, ¶ 20.

 $<sup>^{12}</sup>$  *Id.* at 3321, ¶ 21.

<sup>&</sup>lt;sup>13</sup> See also Utah DPU Comments at 4 ("Although rule and policy changes may be required, compatible state regulation can readily continue to exist together with federal regulation, as it has for many years."); Virginia SCC Comments at 9 ("There is clearly no

regulations may be consistent with federal rules is irrelevant. As long as states are free to regulate in this area, providers of IP-enabled services will be subject to a patchwork of differing and potentially inconsistent requirements. Permitting state-by-state regulation of IP-enabled services creates an environment of intolerable uncertainty as providers face a varying patchwork of state rules that have the potential of imposing inconsistent obligations with respect to the same IP-enabled service, and at a minimum would increase costs to comply with differing requirements state by state.<sup>14</sup>

In the absence of federal preemption, IP-enabled service providers would be required to satisfy the requirements of multiple jurisdictions imposing different certification, tariffing, and other regulatory obligations.<sup>15</sup> This Byzantine regulatory scheme would drive some providers out of the market altogether, undermine the continued investment in and growth of IP communications and IP networks, and ultimately deny consumers the benefits of these transformative services. Preemption of state regulation is thus required to ensure uniform regulatory treatment and to fulfill Congress's goal of "remov[ing] barriers to infrastructure investment" for advanced telecommunications capability.<sup>16</sup>

State regulation of intrastate IP-enabled services would also run afoul of the Commerce Clause. "Under the Commerce Clause, a state regulation is *per se* invalid when it has an

evidence that states are attempting to regulate IP-telephony as either a means to negate the FCC's goals or stop the flow of interstate commerce.").

<sup>&</sup>lt;sup>14</sup> See American Libraries Ass'n v. Pataki, 969 F. Supp. 160, 168 (S.D.N.Y. 1997) ("The unique nature of the Internet highlights the likelihood that a single actor might be subject to haphazard, uncoordinated, and even outright inconsistent regulation by states that the actor never intended to reach and possibly was unaware were being accessed.").

<sup>&</sup>lt;sup>15</sup> See Pulver Order, 19 FCC Rcd at 3323, ¶ 25 ("Certainly, it is this kind of impact Congress considered when it made clear statements about leaving the Internet and interactive computer services free of unnecessary federal and state regulation.").

<sup>&</sup>lt;sup>16</sup> 47 U.S.C. § 157 note (section 706(a) of the Telecommunications Act of 1996).

'extraterritorial reach,' that is, when the statute has the practical effect of controlling conduct beyond the boundaries of the state." *See Cotto Waxo Co. v. Williams*, 46 F.3d 790, 793 (8th Cir. 1995) (citing *Healy v. Beer Inst.*, 491 U.S. 324, 336 (1989)). Because it is impossible to regulate intrastate IP-enabled services without also requiring, as a practical matter, the regulation of interstate services, any state regulation would affect conduct beyond its borders. In other words, the nature of IP-enabled services "not bound by geography may well render an attempt by a state to regulate any theoretical intrastate [IP-enabled services] component an impermissible extraterritorial reach." Federal courts have repeatedly struck down state statutes that have the effect of regulating the Internet as a *per se* violation of the Commerce Clause. <sup>18</sup>

Even where a state regulation does not discriminate between in-state and out-of-state economic activity, <sup>19</sup> it will be invalid if it has more than an "incidental" effect on interstate

 $<sup>^{17}</sup>$  See Pulver Order, 19 FCC Rcd at 3322, ¶ 23. As one court has explained, "[t]he menace of inconsistent state regulation invites analysis under the Commerce Clause of the Constitution, because that clause represented the framers' reaction to overreaching by the individual states that might jeopardize the growth of the nation – and in particular, the national infrastructure of communications and trade – as a whole." *American Libraries*, 969 F. Supp. at 169.

<sup>&</sup>lt;sup>18</sup> See, e.g., PSINet, Inc. v. Chapman, 362 F.3d 227, 240 (4th Cir. 2004) ("The content of the Internet is analogous to the content of the night sky. One state simply cannot block a constellation from the view of its own citizens without blocking or affecting the view of the citizens of other states."); Cyberspace Communications, Inc. v. Engler, 142 F. Supp. 2d 827, 830-31 (E.D. Mich. 2001) ("Michigan's effort to regulate what information may be transmitted to Michigan's children, via the Internet, attempts to control Internet communications which might originate within Michigan, in other states, or in other countries."); American Libraries, 969 F. Supp. at 167 ("[T]he Internet fits easily within the parameters of interests traditionally protected by the Commerce Clause.").

<sup>&</sup>lt;sup>19</sup> A *per se* violation of the Commerce Clause typically occurs when a state regulates instate and out-of-state IP-enabled services so as to benefit the former and burden the latter. *See Oregon Waste Sys., Inc. v. Department of Envtl. Quality*, 511 U.S. 93, 99 (1994). Such "discriminatory" regulations are subject to the strictest scrutiny and are generally held to be invalid unless the state can "sho[w] that it advances a legitimate local purpose that cannot be adequately served by reasonable nondiscriminatory alternatives." *New Energy Co. v. Limbach*, 486 U.S. 269, 278 (1988).

commerce and where "the burden imposed on interstate commerce by state regulation would be 'clearly excessive in relation to the putative local benefits.'"<sup>20</sup> State-imposed regulations of IP-enabled services could place a heavy burden on interstate commerce and on the federal commitment to deregulate the Internet and other interactive computer services. <sup>21</sup> Moreover, requiring IP-enabled service providers to comply with more than 50 potentially different regulatory schemes would create an enormous obstacle to the free flow of interstate communications. Indeed, because it is likely that state regulation of intrastate IP-enabled services would have more than an "incidental" effect on interstate services and because of the substantial burden that such regulation would impose on interstate commerce, few if any examples of intrastate regulation of IP-enabled services would survive constitutional scrutiny. <sup>22</sup> Vigorous competition – not regulation – best protects consumers from unfair or unreasonable rates or conditions. <sup>23</sup>

Only one commenter, the California PUC, asserts that the Commerce Clause does not prohibit states from exercising jurisdiction over IP-enabled services, arguing that "[t]he

 $<sup>^{20}</sup>$  Pulver Order, 19 FCC Rcd at 3323, ¶ 24 (quoting Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970)).

 $<sup>^{21}</sup>$  See id. at 3320, ¶ 19 n.70 ("Any state attempt to impose economic or other regulations that treat FWD like a telecommunications service would impermissibly interfere with the Commission's valid federal interest in encouraging the further development of Internet applications such as these, unfettered by Federal or state regulation, and thus would be preempted.").

<sup>&</sup>lt;sup>22</sup> See id. at 3323, ¶ 24 ("[W]e cannot envision how state economic regulation of the FWD service . . . could benefit the public."); see also PSINet, 362 F.3d at 240 ("If the Commonwealth is capable of limiting its Internet regulation as not to directly offend the Commerce Clause, then it will have no local benefit given the vast number of other communication options available to a juvenile seeking them."); R&M Oil & Supply, Inc. v. Saunders, 307 F.3d 731, 735 (8th Cir. 2002).

<sup>&</sup>lt;sup>23</sup> See Notice of Proposed Rulemaking, *IP-Enabled Services*, 19 FCC Rcd 4863, 4889, ¶ 37 n.123 (2004) ("*NPRM*") (citing *Orloff v. FCC*, 352 F.3d 415, 419, 421 (D.C. Cir. 2003), cert. denied, 2004 U.S. LEXIS 4614 (U.S. June 28, 2004)).

Commerce Clause does not trump statutory provisions in which Congress has expressly reserved state authority in areas historically within the state's domain."<sup>24</sup> But the California PUC is confusing two separate questions. *First*, does the Commission have authority to preempt state regulation of intrastate activity? The answer, as the Ninth Circuit made clear in *California II*, is yes, where "the state regulations would effectively negate the FCC's regulation . . . for interstate services."<sup>25</sup> *Second*, does the state have the constitutional authority to enact regulations that burden interstate commerce? The answer is clearly no, unless it can show that the regulation advances a legitimate local purpose that cannot be adequately served by reasonable nondiscriminatory alternatives.<sup>26</sup>

Moreover, the California PUC mistakenly assumes that the regulation of IP-enabled services is one of the "areas traditionally within the province of state sovereignty." But the Internet and other interactive computer services have historically been a matter of exclusive *federal* concern. *See American Libraries*, 969 F. Supp. at 168; 47 U.S.C. § 230. Consistent with this policy, the Commission has recognized the strong federal interest in ensuring that regulation does nothing to impede the growth of the Internet or the development of competition. Indeed, most recently, in declaring that Pulver's service was an unregulated interstate information service subject to exclusive federal jurisdiction, the Commission noted that "federal authority has already been recognized as preeminent . . . particularly in the area of the Internet and other interactive computer services." *Pulver Order*, 19 FCC Rcd at 3316, ¶ 16.

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<sup>&</sup>lt;sup>24</sup> California PUC Comments at 33.

<sup>&</sup>lt;sup>25</sup> *California II*, 39 F.3d at 933.

<sup>&</sup>lt;sup>26</sup> See Limbach, 486 U.S. at 278.

<sup>&</sup>lt;sup>27</sup> California PUC Comments at 33.

<sup>&</sup>lt;sup>28</sup> See, e.g., Pulver Order, 19 FCC Rcd at 3318-19, ¶ 18.

## III. THERE IS NEARLY UNIVERSAL AGREEMENT THAT ECONOMIC REGULATION WILL HARM CONSUMERS AND DETER INVESTMENT

Economic regulation of VoIP and other IP-enabled services is unnecessary in the competitive environment that exists for these services. In fact, economic regulation of these services – whether through price controls, tariff requirements, or entry and exit restrictions – would affirmatively harm consumers, for it would skew providers' incentives to differentiate their products and to invest in new technologies and innovative services. Competition, rather than regulation, is the surest means to promote consumer welfare, and the Commission should embrace a forward-looking, market-based policy framework for IP-enabled services and competitors.

The commenters in this proceeding are virtually unanimous in their view that economic regulation of VoIP and other IP-enabled services is a bad idea, not only because it is unnecessary and costly but also because it is inferior to competition as a method for protecting consumers and encouraging investment.<sup>29</sup> Commenters generally agree that the Commission's principal responsibility in this area is to refrain from imposing burdensome regulations that inhibit full and fair competition. As Verizon explained in its opening comments, in order to accomplish this goal, the Commission should not impose any of the *Computer Inquiry* requirements on providers of IP-enabled services; it should declare that all providers of VoIP and IP-enabled services are "non-dominant"; and it should forbear from applying the traditional economic regulations of Title II to these services.

<sup>&</sup>lt;sup>29</sup> See, e.g., Voice on the Net ("VON") Coalition Comments at 28-29; Comcast Comments at 9; Federation for Economically Rational Utility Policy ("FERUP") Comments at 10-13; BellSouth Comments at 59-62.

The Commission also should ensure that all providers of IP-enabled services are subject to the same deregulatory policy, regardless of the underlying broadband technology used to provide the service. By treating all providers equally, the Commission will ensure that competition rather than regulation selects the strategies and technologies that will succeed. Providers of IP-enabled services may be telephone companies, cable companies, wireless companies, satellite companies, power companies, applications providers, software companies, content companies, or others. The Commission should adopt a forward-looking, market-based policy framework for *all* competitors. Ensuring that particular technologies are not singled out for uneven regulatory burdens will allow competition to drive decisions about the products and services that providers will offer which, in turn, will encourage technological innovation with respect to IP-enabled services and further benefits to customers.<sup>30</sup>

## A. The "Layers" Framework Should Not Be Used as a Basis for Legal or Policy Decisions

As Verizon explained in its opening comments, the "layers" framework is an engineering model that describes the Internet and IP networks. But the layers "theory" that MCI and others have advocated – which distorts the layers framework to argue that the "physical layer" should be subject to persistent and invasive regulatory obligations – is fatally flawed.<sup>31</sup> These commenters, led by AT&T and MCI, claim that providers of physical networks might impede the

<sup>&</sup>lt;sup>30</sup> See 47 U.S.C. § 157 note (encouraging the Commission to deploy advanced telecommunications services "without regard to any transmission media or technology"); see also News Release, FCC Launches Inquiry, Proposes Actions To Promote the Deployment of Advanced Telecommunications Services By All Providers (FCC Aug. 6, 1998) ("The Commission concluded that Congress made clear that the Communications Act is technologically neutral and is designed to ensure competition in all telecommunications markets.").

<sup>&</sup>lt;sup>31</sup> See, e.g., MCI Comments at 9-20; Association for Local Telecommunications Services ("ALTS") Comments at 3-4; Comptel/ASCENT Comments at 11-15; Covad Comments at 8-12.

free flow of traffic at the higher layers of the network unless this Commission imposes rules to prevent them from doing so.<sup>32</sup> According to MCI and AT&T, this possibility means that local telephone and cable companies should, therefore, be regulated and prevented from "extending their control" over the physical layer into the higher layers of the IP network.<sup>33</sup>

This argument is fundamentally flawed. *First*, it ignores the competitive nature of the underlying broadband services, which makes the feared "extension of control" impossible.

MCI's mantra-like references to "bottleneck" broadband transmission networks have no basis in reality. The physical transmission "layer" of the IP architecture is already highly competitive and is increasingly becoming more so.<sup>34</sup> DSL services provided by telephone companies account for only about one-third of consumer broadband connections, while cable companies are the dominant providers with about two-thirds of the broadband connections. Moreover, both face increasing competition from new intermodal competitors using satellite, <sup>35</sup> fixed and mobile wireless. <sup>36</sup> and broadband-over-power-line<sup>37</sup> platforms. The result of this intense and robust

<sup>32</sup> See, e.g., MCI Comments at 16-20; AT&T Comments at 50-53.

<sup>&</sup>lt;sup>33</sup> See MCI Comments at 16-17; AT&T Comments at 53.

<sup>&</sup>lt;sup>34</sup> See Written Statement of Jeffrey J. Carlisle, Senior Deputy Chief, Wireline Competition Bureau, FCC, Before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, U.S. House of Representatives, at 4-5 (July 7, 2004).

areas, where the costs of deploying new wireline or cable facilities are high. One of the two main broadband satellite providers – Hughes Network Systems – reported 177,000 customers for its DIRECWAY service as of the third quarter of 2003. *See* Hughes Electronics Corp., Form 10-Q, at 38 (SEC filed Nov. 7, 2003) (residential and small office/home-office customers in North America). The other main satellite provider – StarBand – has recently introduced new hardware and service offerings targeted at mass-market customers, with lower prices and higher speeds than were previously available. *See* Satellite Week, *Starband to Emerge from Bankruptcy Protection by Month's End* (Nov. 24, 2003).

<sup>&</sup>lt;sup>36</sup> The Commission has estimated that residential fixed wireless Internet access is available in counties that contain approximately 62 million people, or 22 percent of the U.S.

competition has been rapid deployment of broadband infrastructure nationwide. In addition, thanks largely to head-to-head competition between cable modem and DSL services, more bandwidth is available to more Americans at lower cost then ever before.

Competition for small businesses also is vigorous, just as it is for residential customers.<sup>38</sup> In December 2003, In-Stat/MDR found that that cable modem service is now the *most used* broadband technology by small businesses.<sup>39</sup> AT&T, MCI, and Sprint account for nearly half of all revenues from larger enterprise customers and are the primary service provider for nearly

population. See Eighth Report, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, 18 FCC Rcd 14783, 14882 n.709 (2003).

Manassas, Virginia, and Cincinnati, Ohio, and BPL trials have been conducted in at least eight states. *See* Competition in the Provision of Voice Over IP and Other IP-Enabled Services: Prepared for and Submitted by BellSouth, Qwest, SBC, and Verizon, *IP Enabled Services*, WC Docket No. 04-36, App. A at 13-14 (FCC filed May 28, 2004) ("*VoIP Fact Report*"). Perhaps most important, power lines used to deliver this new broadband technology have *already* been deployed to virtually every home and business in the nation. In the Commission's own words, "[s]ince Access BPL uses the same power lines that carry electricity virtually everywhere, much of the infrastructure needed to operate this technology is already in place, so that major savings in deployment costs and capital may be realized in its deployment." Notice of Proposed Rule Making, *Carrier Current Systems, Including Broadband over Power Line Systems; Amendment of Part 15 Regarding New Requirements and Measurement Guidelines for Access Broadband over Power Line Systems*, 19 FCC Rcd 3335, 3347, ¶ 30 (2004).

<sup>&</sup>lt;sup>38</sup> See VoIP Fact Report, App. A at 3-4.

<sup>&</sup>lt;sup>39</sup> See Kneko Burney, In-Stat/MDR, *The Data Nation: Wireline Data Services Spending and Broadband Usage in the U.S. Business Market; Part Three: Small Businesses (5 to 99 Employees)* (Dec. 2003) (having analyzed home offices as well as businesses with 5 to 99 employees, the study found that, as of year-end 2003, there were 2.1 million small businesses using cable modems compared to 1.4 million small businesses using DSL); see also Kneko Burney & Colin Nelson, In-Stat/MDR, *The Business Hot Wire!: Data Access in the Commercial and Residential Environments of US Businesses; Part One: Cable Modem Services* at 20, Table 11 (Nov. 2003) (businesses with fewer than five employees subscribe to cable modem service more than twice as often as they subscribe to DSL – 48.5% subscribe to cable modem; 17.8% subscribe to DSL).

three-quarters of larger corporate accounts.<sup>40</sup> In contrast, according to a study that Verizon recently conducted, from the customers in its region that purchase the largest amount of high-capacity services, Verizon earns less than nine percent of the total amount spent to purchase telecommunications services.<sup>41</sup>

And this robust competition is continuing and increasing. The arrival of next-generation broadband networks, including the deployment of fiber to the premises, promises to make new services and new bundles of services available to an increasing number of Americans.<sup>42</sup> This will provide competition for cable's core video services, as well as increase competition with cable for broadband services.

Second, the claim that the operators of the physical layer should suffer discriminatory regulation because they supposedly have some unique ability to disrupt or control the flow of information at the other layers is wrong. The layered nature of the IP architecture means that any theoretical concerns about discrimination or disruption of packet flows apply equally at any layer. The backbone providers who operate at the "transport" layer – such as MCI, which,

<sup>&</sup>lt;sup>40</sup> See Competing Providers Are Successfully Providing High-Capacity Services to Customers Without Using Unbundled Elements at 22-23 (attached to Ex Parte Letter from Michael E. Glover, Verizon, to Marlene H. Dortch, FCC, CC Docket Nos. 01-338, et al. (July 2, 2004).

<sup>&</sup>lt;sup>41</sup> *Id.*, Attach. 3, ¶ 20 (declaration of Eric J. Bruno).

<sup>&</sup>lt;sup>42</sup> See, e.g., Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver With Regard to Broadband Services Provided Via Fiber to the Premises, WC Docket No. 04-242, attach. (FCC filed June 28, 2004). This FTTP deployment will create a new network, overlaying the existing circuit-switched feeder and distribution network over an entire central office serving area. The network will be capable of transmitting up to 622 megabits of data per second and receiving 155 megabits of data per second (shared by the customers on each fiber), in addition to a separate path on the same fiber for video. Verizon is contemplating offering a service that would provide FTTP customers with speeds that are ten to twenty times faster than current DSL or cable modem offerings. In addition to the greater speeds and innovative services it will make possible, FTTP is also more reliable than copper-based technologies and, once installed, less expensive to maintain.

through its ownership of UUNet, dominates the Internet backbone<sup>43</sup> – have the same theoretical ability to discriminate among ISPs as those at the physical layer have. Makers of browsers that operate at the "applications" layer, such as Microsoft, could design their software to prevent customers from browsing wherever they wished. Packet flows could be interrupted by efforts to "steer" or constrain traffic at any point in the layered system. But discrimination by any provider would be difficult, readily apparent if engaged in on a sufficiently large scale to provide any meaningful advantage, and unlikely to be tried. The Internet's openness and size prevents any company from successfully "steering" traffic or impeding consumers' choices. The layered nature of the IP architecture means that many different, competing companies are involved at various layers to handle the flow of packets, and all companies have a stake in making sure that traffic flows freely. Any failure to work constructively with other providers and network equipment managers at other layers would damage the interests of companies and consumers alike, thereby subjecting the perpetrator to enormous pressure to act cooperatively.

Despite the evidence of robust competition in the physical layer and the obvious incentives that providers at all layers have to ensure the free flow of information at the other layers, some commenters have urged the Commission to create a set of specific rules regarding interconnection, unbundled access to facilities, routing, and other affirmative obligations.<sup>44</sup> It is clear that specific access and unbundling rules are neither necessary nor desirable at any layer of

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<sup>&</sup>lt;sup>43</sup> See Telegeography, U.S. Internet Geography 2003 at Fig. 4 (July 2002) ("[MCI's] UUNet subsidiary, which by most rankings is the world's largest ISP, is by far the most connected [autonomous system], with more than twice as many connections as its closest neighbor."); Telegeography, Packet Geography 2002 at 202 (Feb. 2002) (MCI "has been the Internet's largest backbone provider since the mid-1990s.").

<sup>&</sup>lt;sup>44</sup> See, e.g., NCTA Comments at 21-23; Cox Comments at 11-13; Level 3 Comments at 25-35; Sprint Comments at 19-20; Z-Tel Comments at 17-21; Time Warner Telecom Comments at 13-15; Missouri PSC Comments at 18-19.

the IP architecture. Instead, the Commission should adopt the "connectivity principles" that the High Tech Broadband Coalition has proposed and that Chairman Powell has recently endorsed. These "connectivity principles" would enhance the protections already secured by the competitive marketplace without undermining the incentives to invest in new services that will drive innovation, growth and consumer welfare:

- Consumers should receive meaningful information regarding their broadband service plans;
- Broadband consumers should have access to their choice of legal Internet content within the bandwidth limits and quality of service of their service plan;
- Broadband consumers should be able to run applications of their choice, within the bandwidth limits and quality of service of their service plans, as long as they do not harm the provider's network; and
- Consumers should be permitted to attach any devices they choose to their broadband connection at the consumer's premises, so long as they operate within the bandwidth limits and quality of service of their service plans and do not harm the provider's network or enable theft of services.<sup>45</sup>

In contrast to the outdated and heavy-handed regulatory approach suggested by some commenters in this proceeding, these guiding principles build on the cooperative, privately negotiated commercial arrangements that have allowed the Internet to develop into the competitive and innovative resource that it is today. And, these principles can provide a framework that will strengthen the Internet and build on its innovative and open nature. This also follows the largely voluntary approach that has guided the development of the bedrock protocols and standards that drive the Internet and IP networks and have contributed to their

<sup>&</sup>lt;sup>45</sup> See Broadband Principles for Consumer Connectivity, attached to Letter from High Tech Broadband Coalition, to Chairman Powell, CC Docket Nos. 02-33, 95-20, and 98-10 and CS Docket No. 02-52 (Sept. 25, 2003); see also Remarks of Michael K. Powell, Chairman, FCC, Preserving Internal Freedom: Guiding Principles for the Industry at 4-5, Silicon Flatirons Symposium on The Digital Broadband Migration: Toward a Regulatory Regime for the Internet Age (Feb. 8, 2004).

growth. The Commission can monitor marketplace developments to determine whether the industry is abiding by these principles. This Commission may then step in more aggressively only if a serious problem arises that appears impervious to market-based solutions. The Commission should not, however, accept AT&T's and MCI's invitation to impose burdensome and investment-deterring regulations today simply because they claim that problems could theoretically arise some day in the future.

# B. The Commission's *Computer Inquiry* Rules, Dominant-Carrier Regulations, and Title II Economic Regulation Should Not Apply to Any Providers of IP-Enabled Services

The Commission must choose not to impose any of the *Computer Inquiry* rules on providers of IP-enabled services, who have a wide range of competitive options for reaching the end user. The unbundling and Open Network Architecture/Comparably Efficient

Interconnection requirements were designed approximately 20 years ago when there was only a single, narrowband network. Today, in contrast, local telephone companies are relative newcomers to broadband connections and lack market power in the provision of broadband and IP-enabled services. As discussed above, recent studies show cable modem to be leading DSL in service to small businesses as well as residential customers, and for large, enterprise customers, the incumbent LECs are only just beginning to compete. Competitive providers are using a variety of IP platforms to reach customers and are not required to obtain basic network services

<sup>&</sup>lt;sup>46</sup> This is why, for example, it is unnecessary and inappropriate at this point to establish a litany of VoIP provider "rights" that would be forcibly imposed upon other carriers and end users. *See*, *e.g.*, NCTA Comments at 21-23. Instead of such heavy-handed regulation, the Commission should rely on reasonable commercial arrangements, which all providers have an incentive to reach. The underlying Internet infrastructure has developed largely through unregulated commercial negotiations, and there is no reason to believe that providers of IP-enabled services will lack appropriate incentives to reach mutually beneficial terms and conditions regarding interconnection arrangements in the future.

from the local telephone company to reach their customers. Thus, the rationale underlying the *Computer Inquiry* rules – that large carriers had market power in transmission services and regulation was necessary to assure nondiscriminatory access to such carriers' transmission services – does not apply to IP-enabled services because of the presence of robust competition in broadband services and the absence of market power in any single provider for such services.<sup>47</sup>

For the same reason, the Commission should find that all providers of IP-enabled services are "non-dominant." No provider, including companies like Verizon that are new entrants in this arena, is in a position to exercise market power over other competitors. By declaring all providers to be non-dominant and deregulating them accordingly, the Commission would foster competition and encourage wider broadband deployment.

The Commission should also exercise its authority under section 10 to forbear from applying Title II economic regulation to IP-enabled services.<sup>48</sup> None of the commenters opposing forbearance has seriously challenged the grounds for granting such relief. Market forces already have created significant price competition;<sup>49</sup> they will continue to ensure that rates

<sup>&</sup>lt;sup>47</sup> By contrast, the Commission only applied such regulations as structural separation, accounting rules, unbundling obligations, and tariffing requirements to large carriers, including AT&T, based on its conclusion that such carriers had market power. The Commission stated in its 1980 *Computer II* Final Decision: "We believe that with the changes taking place in the competitive makeup of the communications industry our regulatory concerns which give rise to the need for structural separation should be directed at monopoly telephone companies exercising significant market power on a broad geographic basis." Final Decision, *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, 77 F.C.C.2d 384, 468, ¶ 220 (1980) ("*Computer II*").

<sup>&</sup>lt;sup>48</sup> The Commission should grant the Petition of SBC Communications Inc. for Forbearance, *Petition of SBC Communications Inc. for Forbearance from the Application of Title II Common Carrier Regulation to IP Platform Services*, WC Docket No. 04-29 (FCC filed Feb. 5, 2004).

<sup>&</sup>lt;sup>49</sup> There have been some significant developments just in the few weeks since the filing of the opening comments and the *VoIP Fact Report* at the end of May 2004. For example, Cablevision recently rolled out a new bundled offering that includes unlimited local and long-

are kept at reasonable levels and that the terms and conditions under which IP-enabled services are offered are reasonable. Competitive markets are superior mechanisms for protecting consumer interests, for they ensure that goods and services are provided to consumers in the most efficient manner possible and at prices that reasonably reflect the costs of production. And Title II economic regulation is unnecessary to ensure that the terms under which IP-enabled services are offered are reasonable because competition will drive both innovation and competitive pricing.

## IV. VOIP PROVIDERS SHOULD PAY APPROPRIATE ACCESS CHARGES WHEN THEY USE THE PSTN TO ORIGINATE OR TERMINATE CALLS

The Commission should require providers of VoIP services to pay appropriate access charges whenever they use the PSTN to originate or terminate interexchange calls. Requiring payment of access charges allows local carriers to recover the costs of the local exchange network and is consistent with the Commission's current rules. Some commenters argued that

distance calling, plus digital cable and high-speed Internet access for \$89.85. See PR Newswire,

Cablevision Promotional Offer for New Customers Features Digital Video, High-Speed Internet and Voice Services for the Monthly Price of \$29.95 Each for First 12 Months If Taken Together (June 21, 2004). This is about the same amount many of its customers already pay just for digital cable and high speed Internet access. As a result, Cablevision says that customers "are essentially receiving their voice service for free." Ken Brown, Cablevision to Offer Internet Phone-Call Bundle, Wall St. J. at B5 (June 21, 2004) (quoting Patricia Gottesman, Senior Vice President, consumer product management and marketing, Cablevision). And, in the last two months, AT&T has expanded its CallVantage offering from 34 markets in 9 states, to 100 markets in 29 states and the District of Columbia. Compare AT&T News Release, AT&T's CallVantage Service Expands To Serve the Western United States (May 17, 2004) with AT&T News Release, AT&T CallVantage Service Now Available in 100 Major Markets (July 12, 2004). "[T]hat's 100 major markets in just 16 weeks since service introduction. . . . This demonstrates the velocity at which we're working to get IP technology into the hands of consumers." AT&T News Release, AT&T CallVantage Service Now Available in 100 Major Markets (July 12, 2004) (quoting Cathy Martine, AT&T senior vice president for Internet Telephony, Consumer Marketing and Sales).

access charges should not apply to VoIP traffic when it uses the PSTN. No commenter, however, has provided the Commission a coherent reason to support that conclusion.

# A. Providers of VoIP Services That Use the PSTN To Originate or Terminate Interexchange Calls Should Pay Appropriate Access Charges

Under the Commission's rules, local carriers are permitted to collect access charges to compensate them for the costs of providing exchange access services. The Commission should require all carriers – including traditional IXCs and providers of VoIP services – that use the PSTN to originate or terminate interexchange calls to compensate incumbents for the costs of using the network. Such a requirement is consistent with the Commission's basic policy that "any service provider that sends traffic to the PSTN should be subject to similar compensation obligations, irrespective of whether the traffic originates on the PSTN, on an IP network, or on a cable network." *NPRM*, 19 FCC Rcd at 4904, \$\mathbb{6}1.\frac{52}{2}\$ Access charges are an essential means through which LECs recover the costs of their networks. Denying LECs access charges for originating or terminating VoIP traffic on the PSTN would deny them the opportunity to recover the costs of providing access services.

<sup>&</sup>lt;sup>50</sup> See 47 C.F.R. § 69.5(b); see also First Report and Order, Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; End User Common Line Charges, 12 FCC Rcd 15982, 15991, ¶ 21 (1997) ("Access Charge Reform Order") ("The access charge rules provide for the recovery of the incumbent LECs' costs assigned to the interstate jurisdiction by the separations rules."), pets. for review denied, Southwestern Bell Tel. Co. v. FCC, 153 F.3d 523 (8th Cir. 1998); Sixth Report and Order, Access Charge Reform, 15 FCC Rcd 12962, 13015, ¶ 130 (2000) ("CALLS Order").

<sup>&</sup>lt;sup>51</sup> Numerous commenters agree. *See* Arizona Corporate Commission Comments at 18; CentruyTel Comments at 2; ICORE Comments at 12-13; GVNW Comments at 5-6; NASUCA Comments at 72-73; Sprint Comments at 26-27; Time Warner Comments at 15-16.

<sup>&</sup>lt;sup>52</sup> See also California PUC Comments at 30 ("The FCC should . . . not pick winners and losers through regulation.").

Some commenters argue that access charges should not apply because, they claim, the rates are too high.<sup>53</sup> In the *AT&T Order*, however, the Commission specifically rejected that argument and squarely held that access charges should apply to AT&T's IP-in-the-middle services.<sup>54</sup> The Commission concluded that, until such time as it changes its access charge regime, access charges remain the mechanism for compensating LECs for the use of their facilities to originate or terminate interstate telecommunications services.<sup>55</sup> Thus, commenters' arguments that access charges are too high provide no basis for avoiding the obligation to pay them.

In any case, those arguments are factually incorrect. In the *CALLS Order* – which exhaustively examined the issue of access charge rates – the Commission determined that interstate access charges are just and reasonable. <sup>56</sup> Commenters' arguments that access charges for VoIP traffic should be set at forward-looking cost levels are similarly flawed. <sup>57</sup> As the Commission explained in the *CALLS Order*, it is already true that rate structures, "to the extent possible, . . . reflect the manner in which carriers incur cost." And, as Verizon has already

<sup>&</sup>lt;sup>53</sup> See, e.g., MCI Comments at 45; ITAA Comments at 12-13; Level 3 Comments at 35; AT&T Comments at 21; Covad Comments at 27.

<sup>&</sup>lt;sup>54</sup> See Order, Petition for Declaratory Ruling That AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges, 19 FCC Rcd 7457, 7469, ¶ 18 (2004) ("AT&T Order").

<sup>&</sup>lt;sup>55</sup> See id.

<sup>&</sup>lt;sup>56</sup> See 15 FCC Rcd at 12978, ¶ 41.

<sup>&</sup>lt;sup>57</sup> See Ad Hoc Comments at 11-12; Covad Comments at 28; Level 3 Comments at 33; Illinois Commerce Commission Comments at 9-10.

<sup>&</sup>lt;sup>58</sup> See 15 FCC Rcd at 13014, ¶ 129.

explained elsewhere, TELRIC rates do not adequately compensate LECs for the real costs of originating or terminating access traffic.<sup>59</sup>

Moreover, most commenters ignore the regulatory arbitrage that would inevitably result if the Commission were to exempt VoIP traffic from access charges in favor of reciprocal compensation payments. The Commission has consistently eschewed market-distorting policies that provide incentives to invest in certain technologies (and to avoid others) merely in order to gain a regulatory advantage. As the Commission explained in the AT&T Order, "IP technology should be deployed based on its potential to create new services and network efficiencies, not solely as a means to avoid paying access charges." 19 FCC Rcd at 7469, ¶ 18.

For those VoIP providers that have arranged with CLECs to convert the VoIP calls and to transport them to the terminating LEC, an additional form of arbitrage exists. Rather than treating this transport service as a portion of jointly provided terminating access of a single interexchange call from a VoIP caller to a called party on the PSTN, the partnering CLECs claim that this portion of the service is a local call that originates on their network and terminates on

<sup>&</sup>lt;sup>59</sup> See Comments of the Verizon Telephone Companies, Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1), and Rule 69.5(b), WC Docket No. 03-266, at 14 (FCC filed Mar. 1, 2004).

<sup>&</sup>lt;sup>60</sup> One commenter candidly admits that a disparate regulatory scheme would encourage carriers to engage in regulatory arbitrage. *See* Ad Hoc Comments at 11 (stating that carriers "can hardly be faulted if, like any provider of a new service built around technological advances, they exploit opportunities for arbitrage between services"). Numerous other commenters agree, however, that the Commission must seek to eliminate opportunities for regulatory arbitrage. *See*, *e.g.*, Alcatel Comments at 20 ("Any compensation system that discriminates in favor or against traffic due to the platform from which it originated or even the location of its destination will create an atmosphere for arbitrage and bypass."); California PUC Comments at 14 ("Functionally equivalent services should be treated similarly when provided by those similarly situated regardless of the technology deployed or the facilities used, in order to prevent undue discrimination and regulatory arbitrage."); NECA Comments at 11 ("Disparities between access rates and reciprocal compensation rates would only encourage uneconomic arbitrage between "traditional" interexchange services and VOIP providers."); *see also* BellSouth Comments at 44-45.

the network of the LEC. As a result, these carriers claim that they not only do not owe the terminating LEC the access charges to which it is entitled but actually go still further and make the extraordinary claim that, under the so-called 3-to1 ratio adopted in the Commission's 2001 *ISP Remand Order*, the terminating LEC has to pay them *more* in the form of reciprocal compensation on traffic flowing in the other direction – typically traffic that is ISP-bound. This represents a complete subversion of the Commission's access charge regime and runs directly contrary to the Commission's policy to reduce regulatory arbitrage opportunities based on technology. This Commission recently reaffirmed that there is "no benefit in promoting one party's use of a specific technology to engage in arbitrage at the cost of what other parties are entitled to under the statute and our rules."

Finally, some commenters have argued that this Commission should simply declare that reciprocal compensation under section 251(b)(5) applies to the origination and termination of interexchange traffic.<sup>64</sup> The Act's text, structure, and legislative history confirm that section 251(b)(5) applies only to traffic that originates on the network of one local exchange

<sup>&</sup>lt;sup>61</sup> See 16 FCC Rcd at 9187-88, ¶ 79. Specifically, because the Commission presumes that any traffic below the 3:1 ratio of terminating to originating traffic is local traffic subject to reciprocal compensation, while traffic that exceeds the 3:1 ratio is ISP bound and subject to a lower compensation rate, this legal sleight of hand will result in an increase in the reciprocal compensation payments that the terminating LEC owes to the CLEC, even though nothing about the nature of this traffic has changed.

<sup>&</sup>lt;sup>62</sup> See Report to Congress, Federal-State Joint Board on Universal Service, 13 FCC Rcd 11501, ¶ 98 (1998) ("Report to Congress") ("If such [phone-to-phone IP telephony service] providers are exempt from universal service contribution requirements, users and carriers will have an incentive to modify networks to shift traffic to Internet protocol and thereby avoid paying into the universal service fund or, in the near term, the universal service contributions embedded in interstate access charges. If that occurs, it could increase the burden on the more limited set of companies still required to contribute. Such a scenario, if allowed to manifest itself, could well undermine universal service.") (footnote omitted).

<sup>&</sup>lt;sup>63</sup> *AT&T Order*, 19 FCC Rcd at 7468, ¶ 17.

<sup>&</sup>lt;sup>64</sup> See, e.g., Level 3 Comments at 8-10; ALTS Comments at 5.

carrier and terminates on the network of another interconnecting local exchange carrier within the same local calling area.<sup>65</sup> It does not affect the requirement to apply appropriate access charges where a VoIP provider uses the PSTN to complete an interexchange call.

#### B. VoIP Services Are Not Subject to the ISP Exemption.

As Verizon explained in its opening comments (at 45-47), the Commission's existing rules governing the payment of access charges are sensible and clear: when providers of VoIP services allow their customers to engage in a real-time communication with customers of other carriers located on the PSTN, they are using the LEC's switching facilities to originate or terminate a call and are required to pay access charges. The limited exception to the rule for ISPs is inapplicable.<sup>66</sup> Some commenters nonetheless claim that VoIP traffic is not subject to the Commission's access charge rules.<sup>67</sup>

In its recent *AT&T Order*, the Commission confirmed that there is no IP exception to the general rule that providers of telecommunications that use the PSTN to originate or terminate interstate traffic are subject to access charges.<sup>68</sup> Rather, to the extent providers use the PSTN to

<sup>&</sup>lt;sup>65</sup> See generally Report, Internet-Bound Traffic Is Not Compensable Under Sections 251(b)(5) and 252(d)(2), Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Intercarrier Compensation for ISP-Bound Traffic, CC Docket Nos. 96-98 & 99-68, at 27-31 (FCC filed May 14, 2004).

<sup>&</sup>lt;sup>66</sup> Level 3's argument that VoIP traffic *de facto* falls into the reciprocal compensation scheme is thus incorrect as a matter of law. *See* Level 3 Comments at 5. Moreover, contrary to Level 3's assertion (*id.* at 3-13), reciprocal compensation rates do not apply to interstate and intrastate interexchange VoIP services. *See* 47 C.F.R. § 51.701(b)(1) (requiring carriers to pay reciprocal compensation only for telecommunications traffic that is not "interstate or intrastate exchange access, information access, or exchange services for such access").

<sup>&</sup>lt;sup>67</sup> See, e.g., AT&T Comments at 21-23; MCI Comments at 44-47.

<sup>&</sup>lt;sup>68</sup> See AT&T Order, 19 FCC Rcd at 7467-68, ¶ 16.

originate or terminate calls, access charges apply.<sup>69</sup> And, to the extent that the Commission concludes that VoIP services are "telecommunications," the Commission's current rules unambiguously require the payment of access charges when such services use local exchange switching facilities for the provision of those services.<sup>70</sup>

The limited exception to this rule for ISPs does not exempt providers of VoIP services from the obligation to pay access charges for VoIP calls that use the PSTN.<sup>71</sup> Verizon and others have explained in some detail that the Commission's ISP exemption is narrow<sup>72</sup> and applies to ISPs that use incumbent LEC networks to allow their customers to get information from the Internet, not (as IXCs do) as a conduit that allows their customers to make or receive calls to or from others.<sup>73</sup> According to the Commission, ISPs do not use LEC services or facilities "in the same way or for the same purposes" as IXCs do.<sup>74</sup>

But that is not true for providers of a VoIP service, which allows a VoIP caller to speak with someone on the PSTN. The Commission never intended the ISP exemption to apply to the situation where a caller uses an ordinary telephone to call a VoIP subscriber or where a VoIP

<sup>&</sup>lt;sup>69</sup> See id. at 7466-67, ¶ 15 ("AT&T obtains the same circuit-switched interstate access for its specific service as obtained by other interexchange carriers, and, therefore, AT&T's specific service imposes the same burdens on the local exchange as do circuit-switched interexchange calls. It is reasonable that AT&T pay the same interstate access charges as other interexchange carriers for the same termination of calls over the PSTN, pending resolution of these issues in the *Intercarrier Compensation* and *IP-Enabled Services* rulemaking proceedings.") (footnote omitted).

<sup>&</sup>lt;sup>70</sup> *Id.* at 7466, ¶ 14 (citing 47 C.F.R. § 69.5(b)).

<sup>&</sup>lt;sup>71</sup> See AT&T Comments at 21; MCI Comments at 48.

<sup>&</sup>lt;sup>72</sup> See Verizon Comments at 45-47; SBC Comments at 68-72.

 $<sup>^{73}</sup>$  See Access Charge Reform Order, 12 FCC Rcd at 16132-33, ¶ 343.

<sup>&</sup>lt;sup>74</sup> See Brief for FCC, Southwestern Bell Tel. Co. v. FCC, No. 97-2618, at 75-76 (8th Cir. filed 1997) (emphasis added); see also id. at 81 (the ISP exemption "in effect treats ISPs as 'end users' of local services and does not require them to pay per-minute access charges").

subscriber uses an IP telephone to reach a called party on the PSTN. In both situations, the VoIP provider is using the PSTN to allow end users either to make or to receive an ordinary telephone call, so it is using the PSTN not "in order to receive local calls from customers who want to buy [its] information services" but rather "in a manner analogous to IXCs." In that situation, access charges apply.

Some commenters argue that the Commission should use this proceeding to change its access charge rules to exempt VoIP traffic and establish a uniform system of intercarrier compensation. But this proceeding is not the appropriate forum for the Commission to consider access charge reform or other intercarrier compensation issues. Those issues are properly before the Commission in the *Intercarrier Compensation* proceeding. The Commission should reaffirm that access charges continue to apply, regardless of whether the call is carried in IP format over some portion of the transmission.

### V. VOIP PROVIDERS SHOULD HAVE SPECIFIC OBLIGATIONS TO FURTHER IMPORTANT PUBLIC POLICY GOALS

Most commenters agree that, although economic regulation of VoIP services would be both unnecessary and harmful, some regulation of VoIP is appropriate to effect important federal policy objectives. Commenters generally agree that rules to ensure law enforcement access, emergency 911 service, universal service, disability access, and availability of numbering

<sup>&</sup>lt;sup>75</sup> Id. at 75-77; see Access Charge Reform Order, 12 FCC Rcd at 16133, ¶ 345.

<sup>&</sup>lt;sup>76</sup> See, e.g., AT&T Comments at 23; 8x8 Comments at 23-25; Cisco Comments at 8-9; Ad Hoc Comments at 10-12; MCI Comments at 47; Vonage Comments 45-47; VON Coalition Comments at 26-28. *But see* Cablevision Comments at 13 (arguing that resolution of universal service and intercarrier compensation "issues should be deferred to the Commission's pending dockets because it would be premature to impose these obligations on VoIP service providers without resolution of the critical issues to be addressed in those separate proceedings").

<sup>&</sup>lt;sup>77</sup> See Notice of Proposed Rulemaking, Developing a Unified Intercarrier Compensation Regime, 16 FCC Rcd 9610 (2001).

resources are appropriate for VoIP. Rules relating to slamming, however, are unnecessary at this stage. Although some commenters have urged the Commission to impose these rules only on some providers of VoIP and not others, the Commission should reject any effort to establish a distorted and discriminatory regulatory regime.

### A. VOIP Providers Should Be Subject to the Communications Assistance for Law Enforcement Act.

The Commission should make clear that the Communications Assistance for Law Enforcement Act ("CALEA")<sup>78</sup> applies to all VoIP providers and not just to the underlying transport provider whose network is used to carry VoIP traffic. Most commenters agree that VoIP providers are subject to CALEA.<sup>79</sup> The few who do not – *e.g.*, Net2Phone, United Telephone Council/United Power Line Association – urge the Commission to refrain from mandating CALEA compliance and to rely instead on cooperative efforts to "work diligently with government agencies to comply with lawful surveillance requests." But the Department of Justice is clearly correct that "CALEA is a statutory mandate," and, "to the extent that CALEA applies to a given service, there is no issue of voluntary compliance."

<sup>&</sup>lt;sup>78</sup> Pub. L. No. 103-414, 108 Stat. 4279 (1994) (codified as amended at 18 U.S.C. § 2522 and 47 U.S.C. §§ 229, 1001-1010). Verizon's support for CALEA's applicability to VoIP is presented in more detail in the Commission's separate proceeding examining law enforcement's needs relative to CALEA. *See* United States Department of Justice, Federal Bureau of Investigation and Drug Enforcement Administration Joint Petition for Expedited Ruling, *Joint Petition for Expedited Ruling Concerning the Communications Assistance for Law Enforcement Act*, D.A. No. 04-700, RM 10865 (FCC filed Mar. 10, 2004).

<sup>&</sup>lt;sup>79</sup> See, e.g., ALTS Comments at 5; BellSouth Comments at 63; Cablevision Comments at 14; Comcast Comments at 15; NCTA Comments at 25.

<sup>&</sup>lt;sup>80</sup> Net2Phone Comments at 24.

<sup>&</sup>lt;sup>81</sup> DOJ Comments at 14; *see id.* ("Neither the Commission nor industry has the authority to replace the mandatory compliance mechanisms specified in the statute with a scheme of voluntary agreements.").

# B. Providers of VoIP Services Should Be Required to Ensure That Their Callers Can Reach Emergency Personnel by Dialing 911.

The Commission should require all VoIP providers to offer a basic level of 911 service but should refrain from requiring VoIP providers immediately to provide access to enhanced 911 ("E911") services until the industry has had an opportunity to develop standards and solutions for VoIP E911 functionality.

Most commenters recognize both the importance of E911 functionality and the need to "afford a reasonable opportunity for the industry to develop an adequate system before instituting mandatory compliance standards." At least one commenter, however, has expressed concern that the public is not generally aware that most VoIP providers are currently unable to offer E911 functionality and that "this public expectation of service makes it totally appropriate for the Commission to impose E911 requirements on VoIP services that interconnect with the PSTN." The solution to that problem, however, is to ensure that providers of VoIP services make clear to their customers what they can and cannot deliver; it is not to impose obligations on VoIP providers that cannot, at least with current technology, be fulfilled. 84

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<sup>&</sup>lt;sup>82</sup> FERUP Comments at 14; *see also* AT&T Comments at 30-33; DialPad, *et al.* Comments at 20-21; Vonage Comments at 43.

<sup>&</sup>lt;sup>83</sup> King County E911 Program Comments at 11 ("The fact that this service is developing so quickly, with numerous providers already delivering service to the public without E911 capabilities, makes it critical for the Commission to act quickly in imposing E911 requirements.").

<sup>&</sup>lt;sup>84</sup> See Vonage Comments at 43 ("[c]onsidering the current technical limitations faced by VoIP service providers . . . , the Commission should not seek to impose standards on VoIP that the industry is currently unable to meet").

# C. VoIP Providers Should Be Required To Contribute to the Universal Service Fund, But They Must Qualify as Eligible Telecommunications Carriers Before Receiving Any Universal Service Support.

The Commission should impose the same universal service obligations on all providers of voice services – both circuit switched and VoIP – regardless of the technology used to provide those services. Several commenters have argued that certain categories of VoIP providers should not be required to contribute directly to the federal universal service fund ("USF").

For example, Vonage suggests that non-facility-based VoIP providers should not be assessed a USF fee because they currently contribute to the USF by purchasing products and services on which CLECs have (at least according to Vonage) already paid USF fees. According to Vonage, non-facility-based VoIP providers "are no different than many non-facilities-based enhanced services, such as Internet access services offered by traditional ISPs, that require significant quantities of telecommunications services in order to provide the application." But even if Vonage could show that CLECs are making USF contributions on some of the services that they sell to Vonage, it would at most be paying universal service fees only on the wholesale *cost* of services it purchases from CLECs rather than on the end-user interstate *revenues* it collects from its own customers. This contribution is far below what Vonage ought to be paying.

<sup>&</sup>lt;sup>85</sup> *Id.* at 47-48; *see also* Skype Comments at 5 ("Providers of applications that reach the PSTN and their customers necessarily pay these costs indirectly, and it would be counterproductive to impose essentially duplicative payment obligations on the nascent services.").

<sup>&</sup>lt;sup>86</sup> Vonage does not contend that it actually makes payments to its CLEC partners that constitute indirect USF contributions. Instead, Vonage only asserts that, as a general matter, some carriers providing telecommunications services to some VoIP providers "typically assess" a USF pass-through amount. *See* Vonage Comments at 48.

Under the current rules, providers of telecommunications services make USF contributions based on "end user" interstate revenues. Even if CLECs pay USF fees on the wholesale costs of these services, and pass these costs on to Vonage, the USF assessment being paid by CLECs is almost certainly less than it would be if Vonage were contributing directly to the USF based on its own end user revenues from these services. This not only potentially destabilizes the fund, but it gives Vonage a significant pricing advantage over its competitors. Although its competitors must pay USF contributions based on the revenues from end users, Vonage can charge its customers less and still cover any costs the CLECs may be passing through to Vonage. This would be similar to allowing a long distance provider to make a USF contribution on the special access services it purchases from the incumbent LEC rather than on the revenues it earns from selling private line services to its own end user customers.<sup>87</sup> In the long term, allowing companies like Vonage to avoid direct contributions will lead to the underfunding of the USF.88 In addition, by shifting more of the costs of the USF to other providers over time, the failure of VoIP providers like Vonage to contribute to the USF will continue to distort competition.

<sup>&</sup>lt;sup>87</sup> See Report and Order, Federal-State Joint Board on First Universal Service Order, 12 FCC Rcd 8776, 9207, ¶ 844 (1997) ("First Universal Service Order") (recognizing that "enduser revenues would also include revenues derived from other carriers" but only "when such carriers utilize telecommunications services for their own internal uses." Otherwise, such carriers would not be considered "end users for those services."), aff'd in part, rev'd and remanded in part sub nom. Texas Office of Pub. Util. Counsel v. FCC, 183 F.3d 393 (5th Cir. 1999).

<sup>&</sup>lt;sup>88</sup> See NASUCA Comments at 68 ("If VoIP providers are not required to help fund the federal USF, the dollar amount of telecommunications revenues upon which the Commission bases current federal universal service contribution requirements will continue to shrink – and at the worst possible time, since funding needs for federal universal service support have continued to increase.").

Other commenters argue that only providers of the underlying broadband transmission services should be required to contribute to the USF. 89 But this view is fundamentally at odds with the way in which USF contributions are currently assessed. Under the Act, all providers of telecommunications services must contribute to the USF "on an equitable and nondiscriminatory basis." 47 U.S.C. § 254(d). Thus, if the Commission determines that VoIP services are "telecommunications services," the Commission's rules would require providers such as Vonage to contribute directly to the USF based on the end user revenues from these services, regardless of whether they have facilities. 90 If the Commission concludes, however, that VoIP services are "information services," section 254(d) authorizes the Commission to require contribution from "any other provider of interstate telecommunications . . . if the public interest so requires." *Id.* Because VoIP providers that allow their customers to connect with the PSTN are providing telecommunications – transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received – they fall within the class of entities that may be required to contribute. 91

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<sup>&</sup>lt;sup>89</sup> See, e.g., MCI Comments at 49 ("contributions should be assessed at only the physical layer of the network on top of which broadband-based applications and services ride, but not on the applications layer"); Skype Comments at 5 (obligations to contribute to the USF "should continue to rest, as they long have, on telecommunication providers").

<sup>&</sup>lt;sup>90</sup> Any entity that provides interstate telecommunications to the public for a fee is required to contribute to the Fund. 47 C.F.R. § 54.706(a); see also First Universal Service Order, 12 FCC Rcd at 9179, ¶ 787 (1997); Report to Congress, 13 FCC Rcd at 11562-63, ¶ 129 & n.304. There is no exemption for non-facilities-based carriers. See id.

<sup>&</sup>lt;sup>91</sup> Further, requiring all VoIP providers to contribute to universal service promotes the "tenet that the class of entities required to contribute to universal service should be broad." *Id.* at 11562, ¶ 128; *see also id.* at 11565, ¶ 132 (recognizing that "the public interest requires a broad contribution base so that the burden on each contributor will be lessened").

Finally, some commenters argue that VoIP providers should be eligible to receive universal service support. 92 Most of these commenters appear to assume that if a provider contributes to the USF, it is therefore eligible to obtain high-cost support. But that assumption confuses obligations to contribute (which apply broadly to "every" provider of telecommunications service) with the ability to receive support (which is limited to a small class of designated carriers for specific types of service). In other words, the statutory goals for contribution and for receipt of support are different, and so the rules for each are different.

Not every entity that contributes to the universal service fund qualifies as an eligible telecommunications carrier ("ETC"). In order to qualify as an ETC for a particular service area, a service provider has to demonstrate not only that it is a "common carrier" that is able to meet certain statutory commitments but also that its designation as an ETC is in the public interest. See 47 U.S.C. § 214(e)(2). If Title I applies to VoIP services, a VoIP provider would not be a "common carrier" and would not, therefore, be eligible to become an ETC. If Title II applies, however, VoIP providers would be "carriers," but designating them as ETCs would not be in the public interest. When determining whether a designation is in the public interest, the Commission must look to the purposes of the support. In "high-cost areas," for example, support is designed to subsidize the high cost of the networks and other infrastructure necessary to serve those areas. See id. § 254(e) (requiring carriers that receive universal service support to "use that support only for the provision, maintenance, and upgrading of facilities and services for which the support is intended"). To the extent VOIP providers do not actually provide the physical

<sup>&</sup>lt;sup>92</sup> See, e.g., Cox Comments at 13; NASUCA Comments at 68; Missouri PSC Comments at 16-17; Time Warner Telecom Comments at 30.

facilities but instead provide applications that ride over the facilities provided by others, it would be inappropriate to subsidize them with universal service support. 93

The Commission has held "that carriers that provide service throughout their service area solely through resale are not eligible for support." To the extent, therefore, that VoIP providers rely on facilities and infrastructure of other carriers and do not provide such facilities themselves, it is unlikely that designating them as ETCs would be in the public interest. Allowing these non-facility-based VoIP providers to collect universal service payments would constitute a windfall, while at the same time diluting the support from its intended purposes -i.e., providing access to basic services in high-cost areas. 95

## D. VoIP Providers Should Be Required To Provide Disability Access When Such Access Becomes Readily Achievable.

Individuals with disabilities should be able to enjoy the benefits of IP technologies, and the Commission should exercise its authority to ensure that VoIP services are accessible to those individuals. But, consistent with 47 U.S.C. § 255, the Commission should require VoIP

<sup>&</sup>lt;sup>93</sup> The Commission is currently examining whether to establish new standards for determining whether granting ETC status is in the public interest and whether to change the rules regarding the portability of high-cost support. *See* Notice of Proposed Rulemaking, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, ¶ 2 (June 8, 2004) (requesting comments on Joint Board's recommendation that the Commission adopt permissive federal guidelines to allow state commissions to consider additional minimum qualifications in evaluating ETC designation requests under the public interest standard). Until this proceeding has been concluded, it would be premature to consider expanding high-cost support to VOIP providers.

 $<sup>^{94}</sup>$  First Universal Service Order, 12 FCC Rcd at 8933-34, ¶ 290; see also 47 C.F.R.  $\S$  54.201(i).

<sup>&</sup>lt;sup>95</sup> See id. at 8933-34, ¶ 290 ("When one carrier serves high cost lines by reselling a second carrier's services, the high costs are borne by the second carrier, not by the first.").

providers to provide access to disability services and equipment only to the extent that such access is "readily achievable." <sup>96</sup>

Indeed, Verizon, in support of the principles underlying section 255, has adopted a set of "Universal Design Principles" that it will consider when developing its VoIP services and products. According to these principles, Verizon will: (1) provide services that can reasonably accommodate a broad range of diverse users, including individuals with disabilities; (2) review existing services to determine which services should be more accessible; (3) design and develop services, to the extent readily achievable, so as to be accessible to a broad range of diverse users; (4) market and provision its services in a manner consistent with accessibility by a broad range of diverse users; and (5) employ these Universal Design Principles when dealing with customers, employees, shareholders, and suppliers.

At this time, several substantial technical challenges make providing teletypewriter ("TTY")-based services over IP networks not yet "readily achievable." The technical standards required for successful TTY service over an IP network are exacting, and the public Internet does not meet these standards today. Only a carefully managed network (specifically, a private network) can sufficiently control packet loss and "jitter" to make possible the provision of a reasonable TTY service. Verizon is continuing to work with its vendors and other equipment

<sup>96 47</sup> U.S.C. § 255(c). The Commission has adopted the definition of "readily achievable" in the Americans with Disabilities Act ("ADA"), and has held under ADA precedent that the analysis should be flexible and be decided on a case-by-case basis. See Report and Order and Further Notice of Inquiry, Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities, 16 FCC Rcd 6417, 6439, ¶ 47 (1999) ("TTY Report and Order"). As the Commission explained, "[t]he primary focus of 'readily achievable' analysis should be . . . : (1) the cost of the action; (2) the nature of the action; and (3) the overall resources available to the entity . . . ." Id. at 6439, ¶ 48.

providers in the context of industry collaborative efforts to develop a solution to the technical challenges associated with providing TTY service over the public Internet. The Commission should refrain at this time from adopting any specific mandates to provide industry participants with flexibility to achieve the best possible technical solution.<sup>97</sup>

The Commission should support these industry collaborative efforts, much as it did when the wireless industry faced its own set of technical challenges in providing TTY service. In that context, although TTY devices worked well with analog wireless phones, they proved to be incompatible with digital wireless services. <sup>98</sup> Recognizing these technical issues in the context of providing 911 service, the Commission decided that the most sensible approach was to allow the wireless industry and the disability community an opportunity to identify the relevant issues and explore how to resolve them. <sup>99</sup> The Commission should adopt a similar approach in the VoIP context.

<sup>&</sup>lt;sup>97</sup> See, e.g., ACUTA Comments at 5 (arguing that the Commission should refrain from imposing any disability requirements "until they are feasible economically and technically"); Bend Broadband Comments at 39 ("The Commission should afford IP Telephony providers time to implement TRS to allow for the development of TDD-like technology suitable for IP telephony.").

<sup>&</sup>lt;sup>98</sup> See Memorandum Opinion and Order, Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, 12 FCC Rcd 22665, 22687, ¶ 45 (1997). See also id. at 22693, ¶ 55 ("The record . . . clearly indicates that it is currently not possible to provide digital wireless services to TTY users.").

 $<sup>^{99}</sup>$  See id. at 22686, ¶ 43 (noting that "it would be prudent for the wireless industry, equipment manufacturers . . . and the disability community to determine the extent of issues pertaining to the provision of these E911 features for TTY calls and whether these issues might be resolved by agreements between the interested parties or by standards bodies").

#### E. The Commission Should Ensure That VoIP Providers Can Obtain Telephone Numbers Directly and That They Comply With Number Portability Rules

VoIP providers should be eligible to obtain North American Numbering Plan ("NANP") telephone numbers. Providing VoIP providers with direct access to numbering resources will allow them to deploy VoIP services in a more efficient and cost-effective manner. At the same time, the Commission must ensure that VoIP providers adhere to all of the Commission's numbering rules to avoid an adverse impact on numbering resources. The Commission must also determine how the local number portability rules apply to VoIP providers.

The Commission should allow VoIP providers the same access to numbering resources that traditional telecommunications carriers enjoy. To the extent VoIP is classified as a telecommunications service, VoIP providers are already eligible under the Commission's rules directly to obtain NANP telephone numbers. Rule 52.9(a)(1) requires that the Commission make "telecommunications numbering resources available on an efficient, timely basis to *telecommunications carriers*." 47 C.F.R. § 52.9(a)(1) (emphasis added). Rule 52.15(g)(2) further provides that an applicant for numbering resources must be "authorized to provide service in the area for which the numbering resources are being requested," *id.* § 52.15(g)(2)(i), which the Commission has interpreted to mean that the carrier must be licensed or certified to provide service.

<sup>&</sup>lt;sup>100</sup> See, e.g., SBC Comments at 87-91; Bend Broadband Comments at 55; Charter Comments at 13-14; Cisco Comments at 10; Ohio PUC Comments at 17.

<sup>&</sup>lt;sup>101</sup> The Act defines a "telecommunication carrier" as "any provider of telecommunications services, except that such term does not include aggregators of telecommunications services." 47 U.S.C. § 153(44).

 $<sup>^{102}</sup>$  See Report and Order and Further Notice of Proposed Rulemaking, Numbering Resource Optimization, 15 FCC Rcd 7574, 7615, ¶ 97 (2000) ("First Numbering Order") (rule requires carriers to "provide, as part of their applications for initial numbering resources, evidence (e.g., state commission order or state certificate to operate as a carrier) demonstrating

Section 251(e)(1) requires the Commission to make numbers "available on an equitable basis," 47 U.S.C. § 251(e)(1), and this supports the argument that telephone numbers should be made available to VoIP providers. The Commission should modify its existing rules to allow VoIP providers to obtain access to numbering resources.

Permitting VoIP providers to obtain direct access to numbering resources will allow them to deploy their services in an efficient and cost-effective manner. Foreclosing such access would compel them to enter into business arrangements with third-party LECs merely to obtain numbers, and this could introduce additional costs and delay into the process of providing VoIP services. Moreover, allowing VoIP providers to obtain NANP numbers directly permits them to connect to the PSTN more efficiently, to the benefit of VoIP consumers. The Commission should clarify, however, that VoIP providers assigning public NANP telephone numbers to their own end users must provide connectivity between their facilities and the PSTN and provide transparent incoming and outgoing call completion to both VoIP and PSTN telephone users. Plainly, denying VoIP providers access to numbering resources when they are otherwise willing

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that they are licensed and/or certified to provide service in the area in which they seek numbering resource[s]"); *id.* at 7614, ¶ 96 (stating that a "carrier shall not receive numbering resources if it does not have the appropriate facilities in place, or is unable to demonstrate that it will have them in place, to provide service"); *see also* 47 C.F.R. § 52.15(g)(2)(ii) (requiring applicants to "be capable of providing service within sixty (60) days of the numbering resources activation date").

 $<sup>^{103}</sup>$  See First Numbering Order, 15 FCC Rcd at 7615, ¶ 99 (stating that the Commission did "not intend to circumscribe any carrier's ability to obtain initial numbering resources in order to initiate service," but rather intended to "prevent actual or potential abuses of the number allocation process").

<sup>&</sup>lt;sup>104</sup> See Order, Administration of the North American Numbering Plan, CC Docket 99-200, DA 04-1721, ¶ 4 (WCB June 17, 2004) ("By receiving numbers directly, [a VoIP provider] will be able to interconnect with the PSTN on a trunk-side basis at a centralized switching location, which it believes will allow it to more efficiently use its softswitch and gateways to develop services that overcome the availability and scalability limitations inherent in current VoIP interconnections with the PSTN.").

and able to use those numbers to serve customers would not be "equitable." 47 U.S.C.  $\S$  251(e)(1). 105

At the same time, however, the Commission must protect against the unnecessary waste or premature exhaustion of numbering resources. The Commission should thus require VoIP providers to comply with the Commission's rules related to the thousand block pooling requirements, *see First Numbering Order*, 15 FCC Rcd at 7621, ¶ 116, number reporting requirements, *see* 47 C.F.R. § 52.15(f)(4)-(5), and numbering assignment practices (*i.e.*, sequential numbering), *see id.* § 52.15(j).

Finally, the Commission should determine how the local number portability rules should be applied to VoIP providers today, when such providers obtain numbers from a CLEC partner. Currently, carriers are required to honor valid porting requests from other carriers, presumably even if the requesting carrier is providing service to a VoIP provider. The Commission must clarify, however, whether these porting rules apply equally when a consumer wishes to port from a VoIP provider back to a local exchange carrier. In addition, the Commission must determine how porting rules apply if VoIP providers are able to secure numbers directly, without the intervention of a CLEC partner.

 $<sup>^{105}</sup>$  See also 47 C.F.R. § 52.9(a)(2) (requiring that the Commission "[n]ot unduly favor or disfavor any particular telecommunications industry segment"); id. § 52.9(a)(3) (requiring that the Commission "[n]ot unduly favor one technology over another").

<sup>&</sup>lt;sup>106</sup> This is not just a theoretical concern. At least one VoIP provider has refused a request to port the customer's telephone number to Verizon on the grounds that VoIP providers are not subject to the Commission's porting requirements. The Commission should clarify that VoIP providers, or their CLEC partners, must comply with number portability requirements. As Verizon explained in its opening comments (at 52 n.128), however, the Commission should not require LECs to port in numbers from a VoIP provider in the limited circumstance where a VoIP customer chooses an NPA-NXX designation that falls outside of the customer's geographic rate center. Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, *Telephone Number Portability*; *CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues*, 18 FCC Rcd 23697, 23714-15, ¶ 43 (2003).

#### F. The Commission Should Not Impose Slamming Rules on VoIP Services

The Commission should not apply its slamming regulations to providers of VoIP services. The Commission's slamming rules prohibit a telecommunications carrier from changing a customer's long-distance provider without the customer's consent, which is typically accomplished through an unauthorized request to the customer's local phone provider to switch long-distance carriers. As commenters generally recognize, these rules are unnecessary in the VoIP context; indeed, it is not even clear that carriers can engage in slamming given the nature of IP-enabled service technologies. A slammer would need direct access to the specific telephone adapter tied to an end user's VoIP service in order to slam that end user. This is highly unlikely. In any event, until slamming becomes a significant problem, the Commission should permit the generally applicable consumer protection laws governing unfair business practices regulate the behavior of VoIP providers in this area.

Competition, rather than regulation, is the surest means to protect consumers from slamming, and the Commission should embrace wherever possible a market-based policy framework for IP-enabled services. Because consumers of VoIP and other IP-enabled services have competitive choices, providers of these services have strong incentives to be responsive to consumer demands, including consumers' expectations that slamming is not permissible.<sup>110</sup>

<sup>&</sup>lt;sup>107</sup> See 47 U.S.C. § 258(a) ("No telecommunications carrier shall submit or execute a change in a subscriber's selection of a provider of telephone exchange service or telephone toll service except in accordance with such verification procedures as the Commission shall prescribe.").

<sup>&</sup>lt;sup>108</sup> See, e.g., 8x8 Comments at 30; Bend Broadband Comments at 45; AT&T Comments at 41.

<sup>&</sup>lt;sup>109</sup> AT&T Comments at 41.

<sup>&</sup>lt;sup>110</sup> See NPRM, 19 FCC Rcd at 4913, ¶ 74 n.219.

#### CONCLUSION

The Commission should use this proceeding to establish a forward-looking, deregulatory environment for IP-enabled services — one that will encourage the kinds of investment, innovation, and risk-taking that may truly revolutionize the way Americans communicate with one another in the years ahead. The Commission should allow IP-enabled services to develop free from traditional economic regulation and regulate only when necessary to promote specific policy objectives. The Commission should resist the call of some commenters to impose unfair and unjustified regulatory burdens on only a subset of IP-enabled service providers.

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